

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.  
I-2-55.4USSERIAL NO.  
09/851,740APPLICANT  
Schilling et al.FILING DATE  
May 9, 2001GROUP  
~~2003~~ 2667

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AB	AA*	4	4	7	0	1	3	8	9/84	Gutlber			
AB	AB*	4	9	0	1	3	0	7	2/90	Gilhousen et al.			
AB	AC*	4	9	2	8	2	7	4	5/90	Gilhousen et al.			
AB	AD*	5	0	2	8	8	8	7	7/91	Gilmore			
AB	AE*	5	0	9	9	4	9	3	3/92	Zeger et al.			
AB	AF*	5	1	0	3	4	5	9	4/92	Gilhousen et al.			
AB	AG*	5	1	5	1	9	1	9	9/92	Dent			
AB	AH*	5	2	1	8	6	1	9	6/93	Dent			
AB	AI*	5	2	2	4	1	2	2	6/93	Bruckert			
AB	AJ*	5	2	3	7	5	8	6	8/93	Bottomley			
AB	AK*	5	2	3	5	6	1	2	8/93	Stilwell et al.			
AB	AL*	5	2	7	6	7	0	4	1/94	Dixon			
AB	AM*	5	3	4	3	4	9	6	8/94	Honig et al.			
AB	AN*	5	3	4	5	4	6	8	9/94	Bi			
AB	AO*	5	3	5	3	3	0	4	10/94	Mochizuki			
AB	AP*	5	3	7	7	2	2	5	12/94	Davis			
AB	AQ*	5	4	1	8	8	1	4	5/95	Hulbert			

 RECEIVED  
OCT 01 2001  
Technology Center 2600

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	NO
AB	AR*	S5	4	8	3	5	7	9		Japan			X	
AB	AS*	S5	7	3	2	1	0	7		Japan			X	
AB	AT*	9	3	0	6	5	5	0	4/93	PCT				

EXAMINER

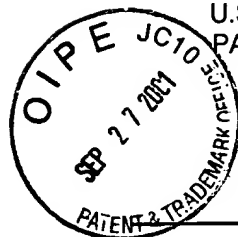
ALEXANDER BOAKYE

DATE CONSIDERED

7/10/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

ATTY. DOCKET NO.  
I-2-55.4USSERIAL NO.  
09/851,740U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

APPLICANT  
Schilling et al.FILING DATE  
May 9, 2001GROUP  
2667 2663

Technology Center 2600

OCT 01 2001

RECEIVED

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AB	AU* 5 4 6 7 3 6 8	11/95	Takeuchi et al.			

## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
					YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AB	AV*	S. Moshavi, E. Kanterakis, and D. Schilling, "Multistage Linear Receivers for DS-CDMA Systems," (1994), (unpublished Ph.D. dissertation, City University of New York).
AB	AW*	H.V. Poor and S. Verdu, "Single-User Detectors for Multiuser Channels," IEEE Trans. Commun., vol. 36, no. 1, pp. 50-60, Jan. 1988.
AB	AX*	A.M. Monk, M. Davis, L.B. Milstein, and C.W. Helstrom, "A Noise-Whitening Approach to Multiple Access Noise Rejection-Part I: Theory and Background," IEEE J. Select. Areas Commun., vol. 12, no. 5, pp. 817-827, June 1994.
AB	AY*	M. Rupf, F. Tarkoy, and J.L. Massey, "User-Separating Demodulation for Code-Division Multiple-Access Systems," IEEE J. Select. Areas Commun., vol. 12, no. 5, pp. 786-795, June 1994.
AB	AZ*	S. Verdu, "Minimum Probability of Error for Asynchronous Gaussian Multiple-Access Channels," IEEE Trans. Inform. Theory, vol. IT-32, no. 1, pp. 85-96, Jan. 1986.
AB	BA*	Z. Xie, C.K. Rushforth, and R.T. Short, "Multiuser Signal Detection Using Sequential Decoding," IEEE Trans. Commun., vol. 38, no. 5, pp. 578-583, May 1990.
AB	BB*	A.J. Viterbi, "Very Low Rate Convolutional Codes for Maximum Theoretical Performance of Spread-Spectrum Multiple-Access Channels," IEEE J. Select. Areas Commun., vol. 8, no. 4, pp. 641-649, May 1990.
AB	BC*	P. Patel and J. Holtzman, "Analysis of a Simple Successive Interference Cancellation Scheme in a DS/CDMA System," IEEE J. Select. Areas Commun., vol. 12, no. 5, pp. 796-807, June 1994.

EXAMINER

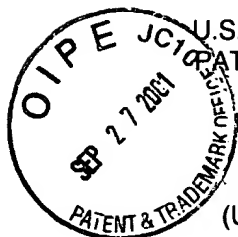
ALEXANDER BOAKYE

DATE CONSIDERED

7/10/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

ATTY. DOCKET NO.  
I-2-55.4USSERIAL NO.  
09/851,740U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

APPLICANT  
Schilling et al.FILING DATE  
May 9, 2001GROUP  
2663  
2667OCT 01 2001  
Technology Center 2600

RECEIVED

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AB	BD* 5 5 7 9 3 0 4	11/96	Sugimoto et al.			

## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
					YES NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AB	BE*	S. Kubota, S. Kato, and K. Feher, "Inter-Channel Interference Cancellation Technique for CDMA Mobile/Personal Communication Base Stations," Proc. IEEE Int. Symp. Spread Spectrum Tech. Appl. (ISSSTA '92), pp. 91-94, Nov. 1992).
AB	BF*	P. Dent, B. Gudmundson, and M. Ewerbring, "CDMA-IC: A Novel Code Division Multiple Access Scheme based on Interference Cancellation," Proc. PIMRC, Boston, MA, Oct. 1992, pp. 98-102.
AB	BG*	M.K. Varanasi and B. Aazhang, "Multistage Detection in Asynchronous Code-Division Multiple-Access Communications," IEEE Trans. Commun., vol. 38, no. 4, pp. 509-519, Apr. 1990.
AB	BH*	R. Kohno, H. Imai, M. Hatori, and S. Pasupathy "An Adaptive Canceller of Cochannell Interference for Spread-Spectrum Multiple-Access Communication Networks in a Power Line," IEEE J. Select. Areas Commun., vol. 8, no. 4, pp. 691-699, May 1990.
AB	BI*	Y.C. Yoon, R. Kohno, and H. Imai, "A Spread-Spectrum Multiaccess System with Cochannell Interference Cancellation for Multipath Fading Channels," IEEE J. Select. Areas Commun., vol. 11, no. 7, pp. 1067-1075, Sept. 1993.
AB	BJ*	M.K. Varanasi and B. Aazhang, "Near-Optimum Detection in Synchronous Code-Division Multiple-Access Systems," IEEE Trans. Commun., vol. 39, no. 5, pp. 725-736, May 1991.
AB	BK*	D. Divsalar and M.K. Simon, "Improved CDMA Performance using Parallel Interference Cancellation," MILCOM'94, Fort Monmouth, NJ, Oct. 1994.
AB	BL*	K.S. Schneider, "Optimum Detection of Code Division Multiplexed Signals," IEEE Trans. Aerospace Electronic. Syst., vol. AES-15, no. 1, pp. 181-185, Jan. 1979.

EXAMINER

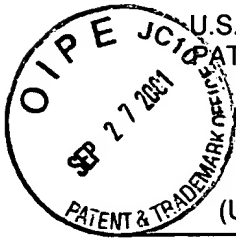
ALEXANDER BOAKYE

DATE CONSIDERED

7/10/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449

ATTY. DOCKET NO.  
I-2-55.4USSERIAL NO.  
09/851,740U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

APPLICANT  
Schilling et al.FILING DATE  
May 9, 2001GROUP  
2663  
2667

Technology Center 2600

OCT 01 2001

RECEIVED

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
					YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AB	BM*	R. Lupas and S. Verdu, "Linear Multiuser Detectors for Synchronous Code-Division Multiple-Access Channels," IEEE Trans. Inform. Theory, vol. 35, no. 1, pp. 123-136, Jan. 1989.
AB	BN*	R. Lupas and S. Verdu, "Near-Far Resistance of Multiuser Detectors in Asynchronous Channels," IEEE Trans. Commun., vol. 38, no. 4, pp. 496-508, Apr. 1990.
AB	BO*	Z. Zvonar and D. Brady, "Coherent and Differentially Coherent Multiuser Detectors for Asynchronous CDMA Frequency-Selective Channels," Proc. IEEE MILCOM'92, pp. 442-446.
AB	BP*	Z. Xie, R.T. Short, and C.K. Rushforth, "A Family of Suboptimum Detectors for Coherent Multiuser Communications," IEEE J. Select. Areas Commun., vol. 8, no. 4, pp. 683-690, May 1990.
AB	BQ*	A. Kajiwarra and M. Nakagawa, "Microcellular CDMA System with a Linear Multiuser Interference Canceller," IEEE J. Select Areas Commun., vol. 12, no. 4, pp. 605-611, May 1994.
AB	BR*	B. Aazhang, B. Paris, and G.C. Orsak, "Neural Networks for Multiuser Detection in Code-Division Multiple-Access Communications," IEEE Trans. Commun., vol. 40, no. 7, pp. 1212-1222, July 1992.
AB	BS*	R.A. Iltis and L. Mailaender, "An Adaptive Multiuser Detector with Joint Amplitude and Delay Estimation," IEEE J. Select. Areas Commun., vol. 12, no. 5, pp. 774-785, June 1994.
AB	BT*	D.S. Chen and S. Ray, "An Adaptive Multiuser Receiver for CDMA System," IEEE J. Select. Areas Commun., vol. 12, no. 5, pp. 808-816, June 1994.

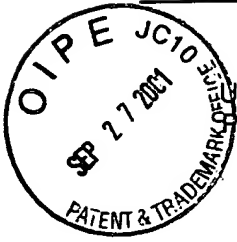
EXAMINER

ALEXANDER BOAKYE

DATE CONSIDERED

7/16/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEINFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

ATTY. DOCKET NO.  
I-2-55.4USSERIAL NO.  
09/851,740APPLICANT  
Schilling et al.FILING DATE  
May 9, 2001GROUP  
~~2603~~  
2667

Technology Center 2600

OCT 01 2001

RECEIVED

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AB	BU*	A. Duel-Wallen, "Decorrelating Decision-Feedback Multiuser Detector for Synchronous Code-Division Multiple-Access Channel," IEEE Trans. Commun., vol. 41, no. 2, pp. 285-290, Feb. 1993.
AB	BV*	L. Wei and C. Schlegel, "Synchronous DS-SSMA System with Improved Decorrelating Decision-Feedback Multiuser Detection," IEEE Trans. Veh. Technol., vol 43, no. 3, pp. 767-772, Aug. 1994.
AB	BW*	Jalloul, Louary M.A. and Holtzman, Jack M., "Performance Analysis of DS/CDMA with Noncoherent M-ary Orthogonal Modulation in Multipath Fading Channels," WINLAB, Dept. Of Electrical Engineering, Rutgers, The State University of New Jersey.
AB	BX*	Patel, Pulin and Holtzman, Jack, "Analysis of a Simple Successive Interference Cancellation Scheme in DS/CDMA System," WINLAB, Dept. Of Electrical Engineering, Rutgers, The State University of New Jersey.
AB	BY*	M. Kawabe, T. Kato, A. Kawahashi, T. Sato and A. Fukasawa, "Advanced CDMA Scheme Based on Interference Cancellation"
AB	BZ*	S. Tachikawa, "Characteristics of M-ary/Spread Spectrum Multiple Access Communication Systems Using Co-Channel Interference Cancellation Techniques"

EXAMINER

ALEXANDER BOAKYE

DATE CONSIDERED

7/10/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.